

KIC 007199235

Q1-17 DR25 TCE Parameters

| TCE | Run Type | KOI? | Period (Days) | Epoch (BKJD) | Depth (ppm) | Duration (Hours) | MES | SNR | R_{\star} (R_{\odot}) | T_{\star} (K) | R_p (R_{\oplus}) | S_p (S_{\oplus}) |
|--------------|----------|------|---------------|--------------|-------------|------------------|------|-----|-----------------------------|-----------------|------------------------|------------------------|
| 007199235-01 | OBS | No | 0.566771 | 131.747158 | 0.1 | 3.193 | 13.6 | 0.0 | 0.96 | 5841 | 0.03 | 5862.94 |

Robovetter Results

| TCE | Run Type | Disp | Score | N | S | C | E | Comments |
|--------------|----------|------|-------|---|---|---|---|---|
| 007199235-01 | OBS | FP | 0.00 | 1 | 0 | 1 | 1 | SWEET_NTL—LPP_DV—LPP_ALT—CENT_UNRESOLVED_OFFSET—EPHEM_MATCH |

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

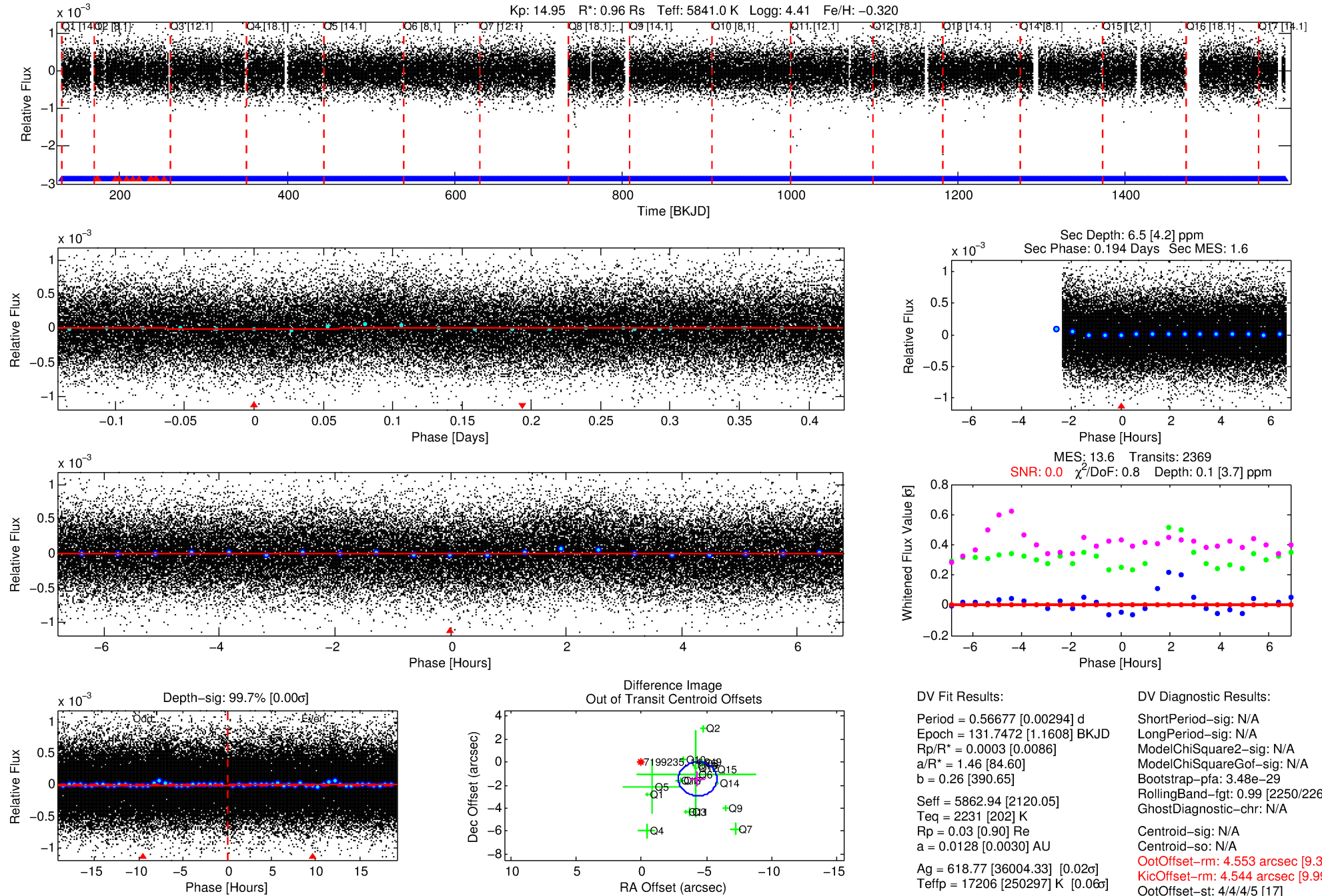
Ephemeris Match Information For 007199235-01

| TCE (1) | KIC | Parent (2) | Parent KIC | $P_1:P_2$ | Dist ($''$) | Δ Row | Δ Col | m_2 | m_1 | D_2/D_1 | Mechanism | Flag | σ_P | σ_T |
|--------------|---------|------------|------------|-----------|---------------|--------------|--------------|-------|-------|-----------|------------|------|------------|------------|
| 007199235-01 | 7199235 | RR-Lyr-pri | 7198959 | 1:1 | 296.8 | 72 | 19 | 7.86 | 14.95 | 623300.00 | Direct-PRF | 0 | 4.59 | 18.28 |

Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

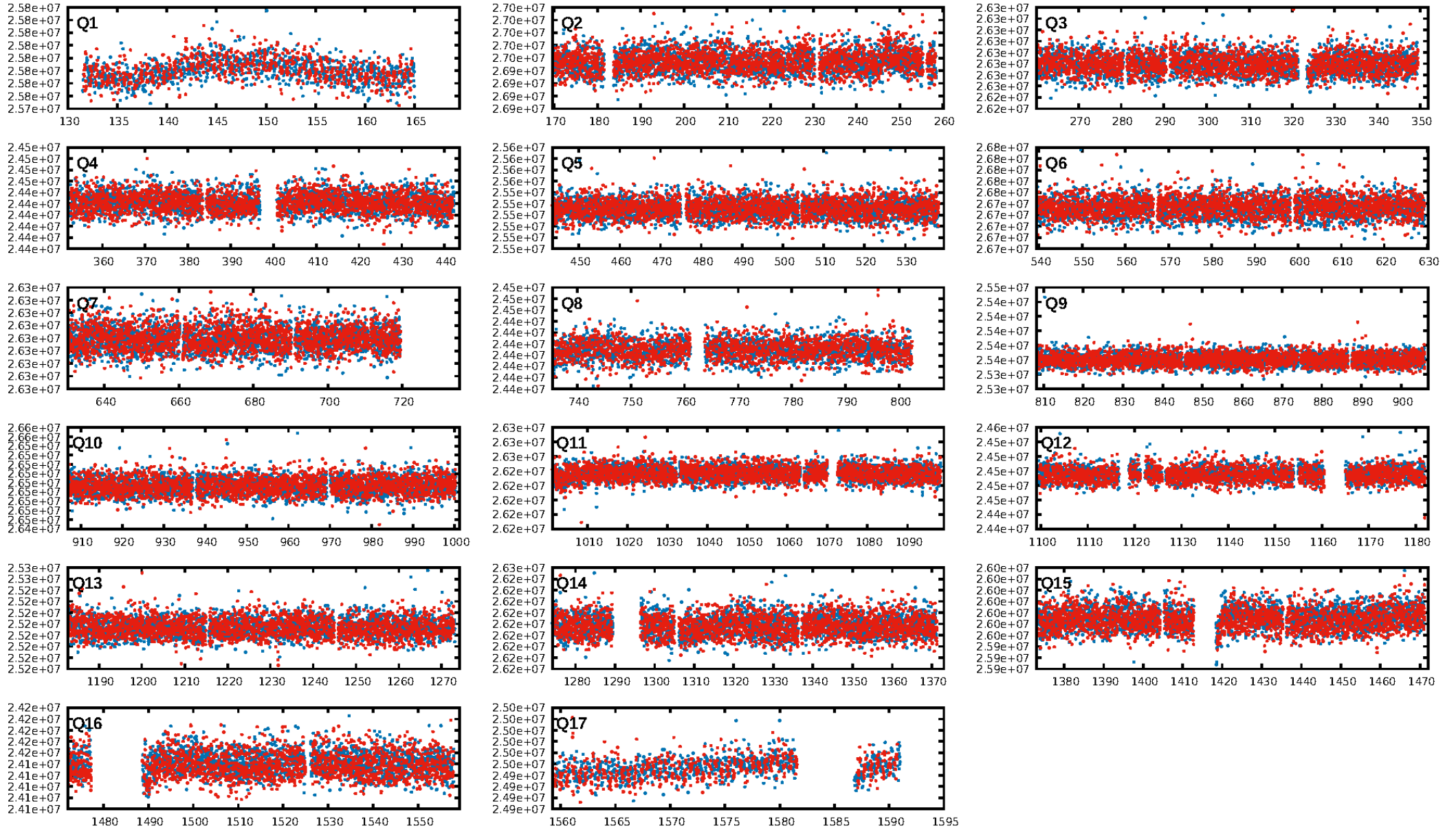
KIC: 7199235 Candidate: 1 of 1 Period: 0.567 d



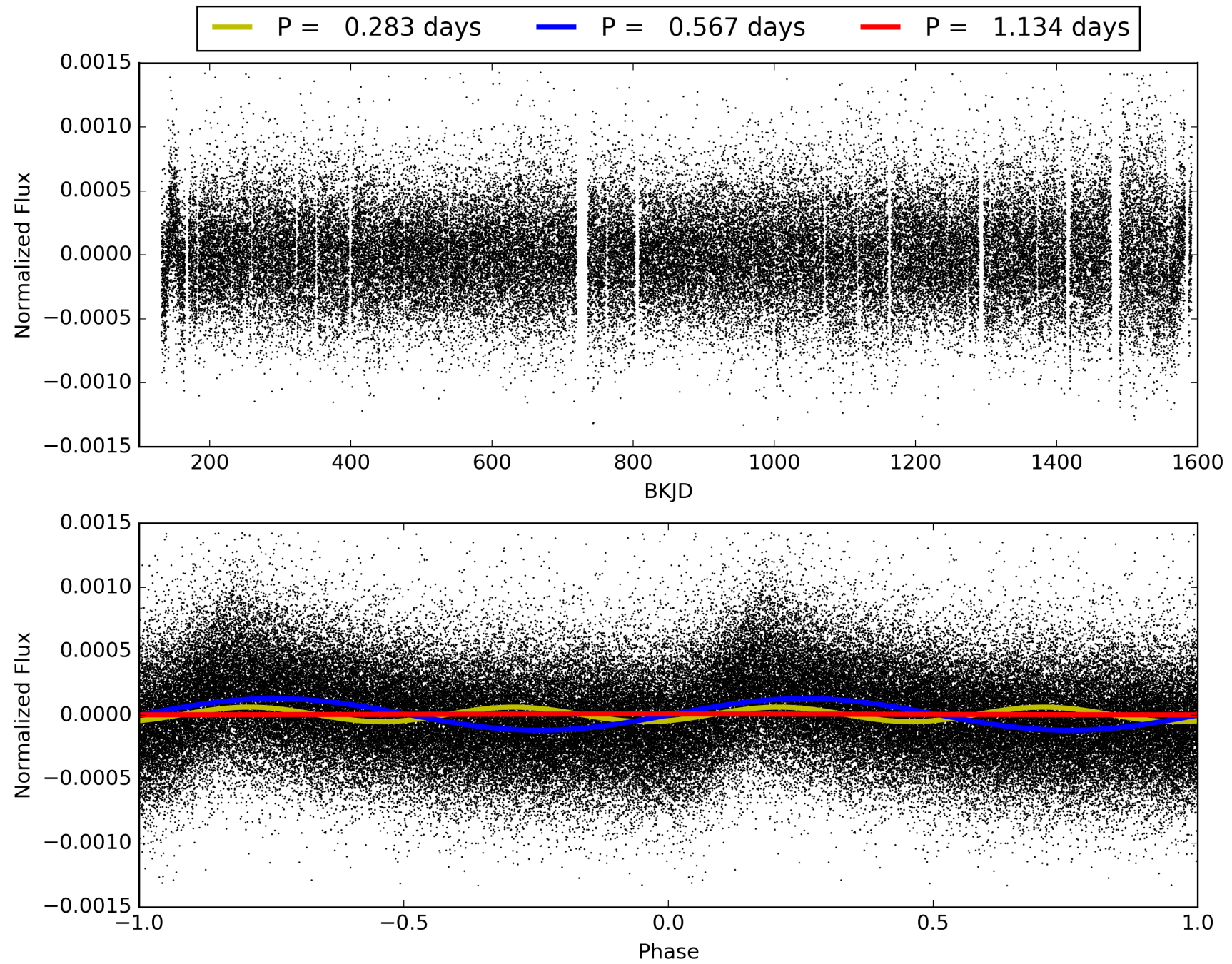
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 09:17:06 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 007199235-01, PDC Light Curves

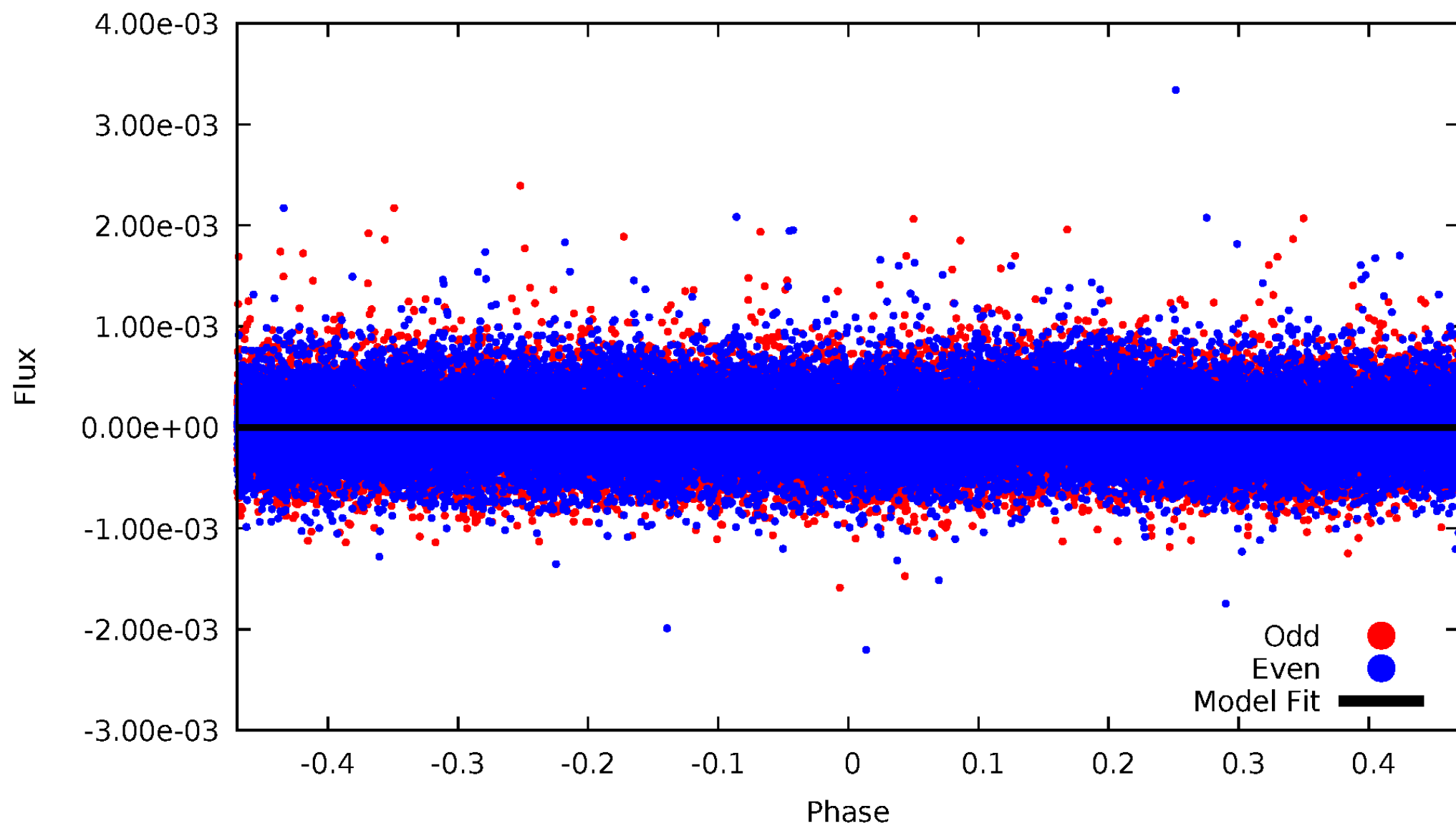


TCE 007199235-01



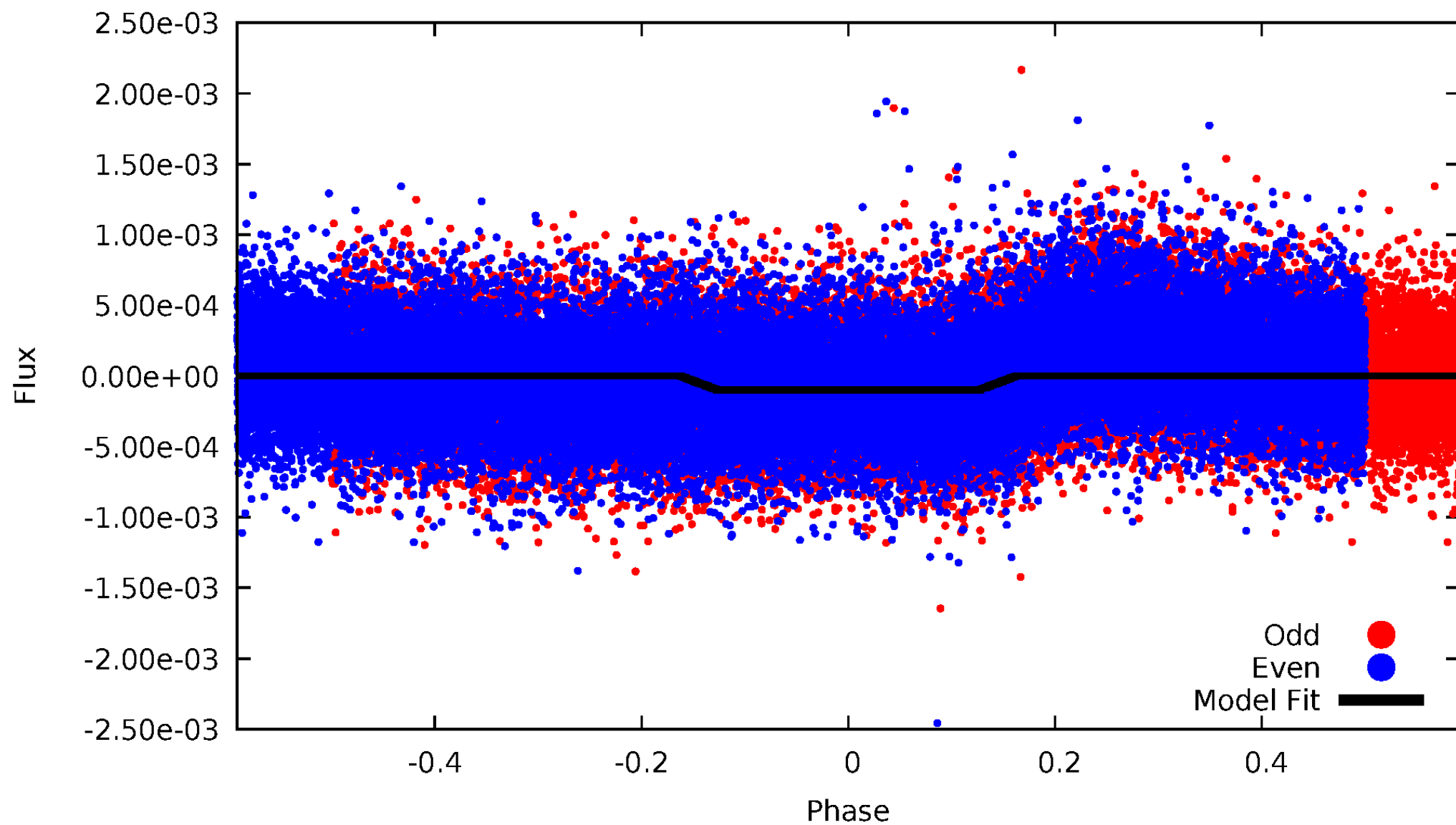
DV Odd/Even

TCE 007199235-01

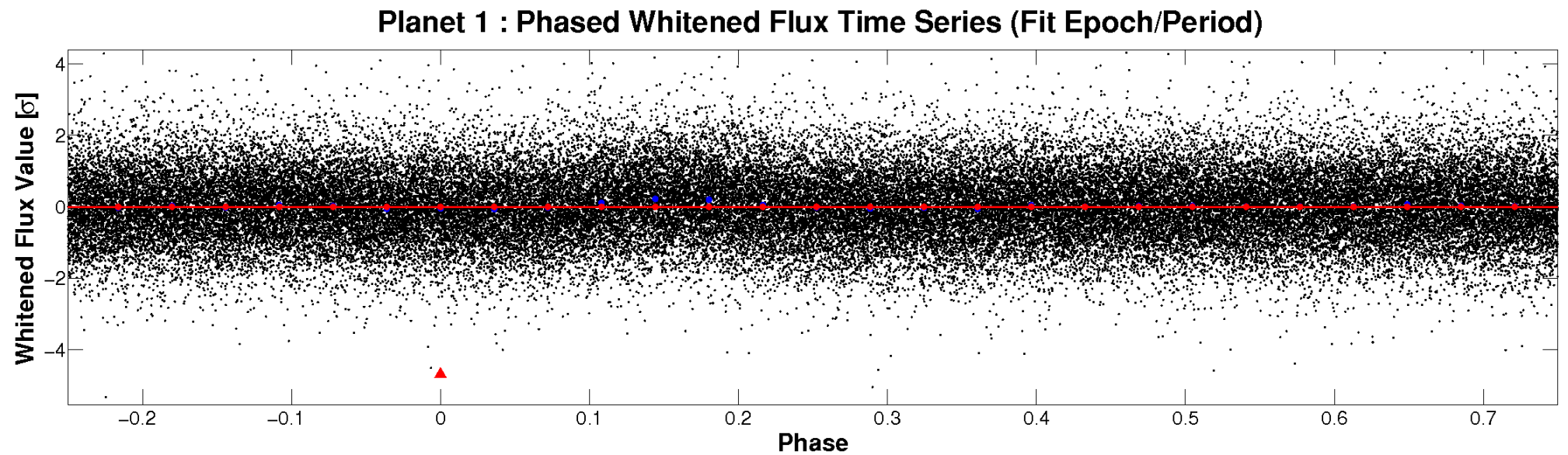
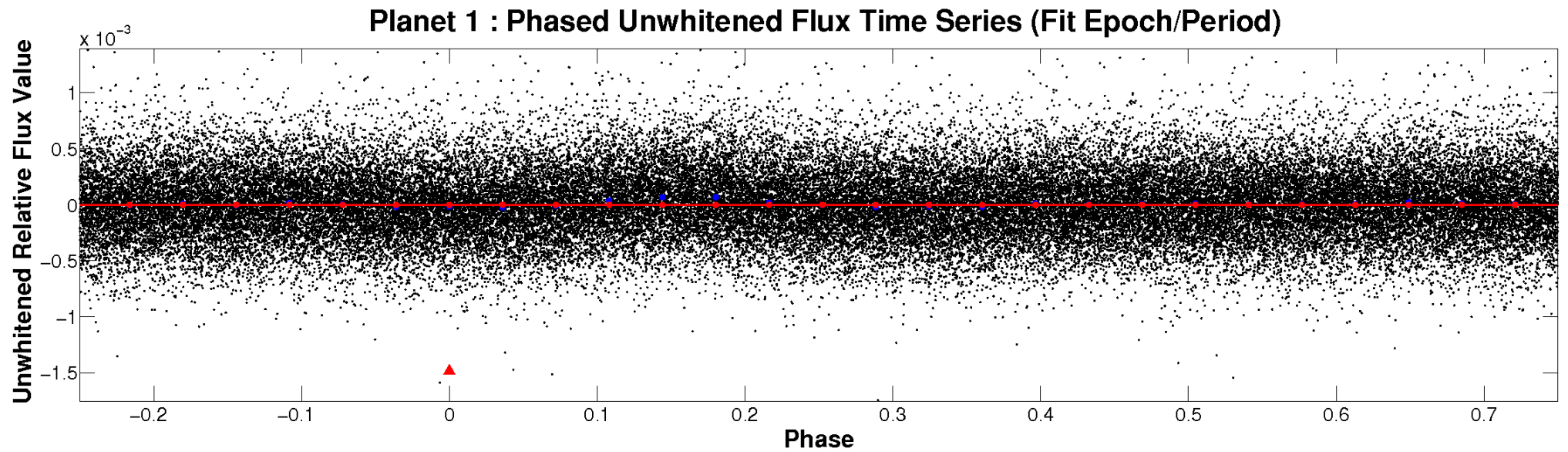


ALT Odd/Even

TCE 007199235-01

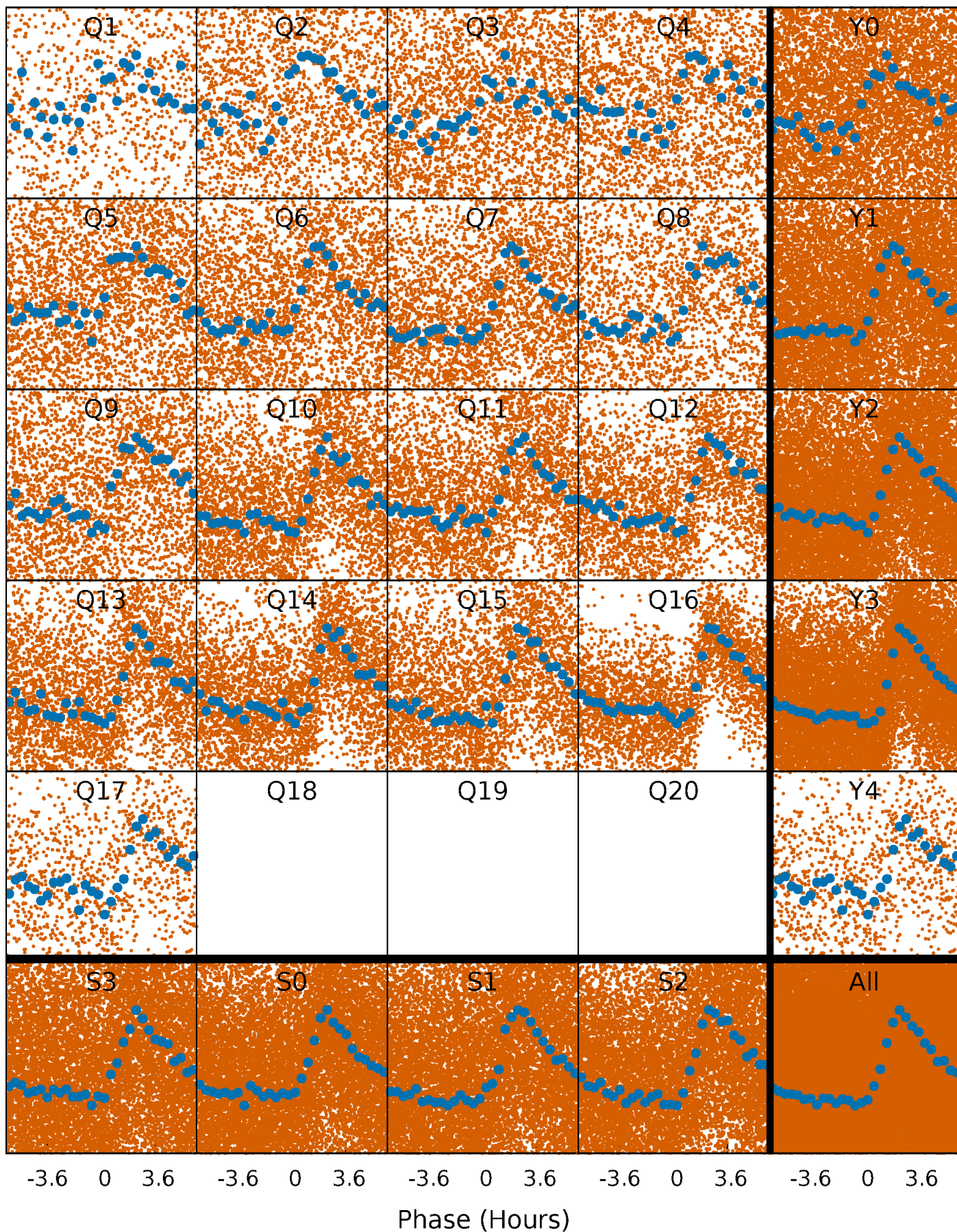


Non-Whitened Vs. Whitened Light Curve



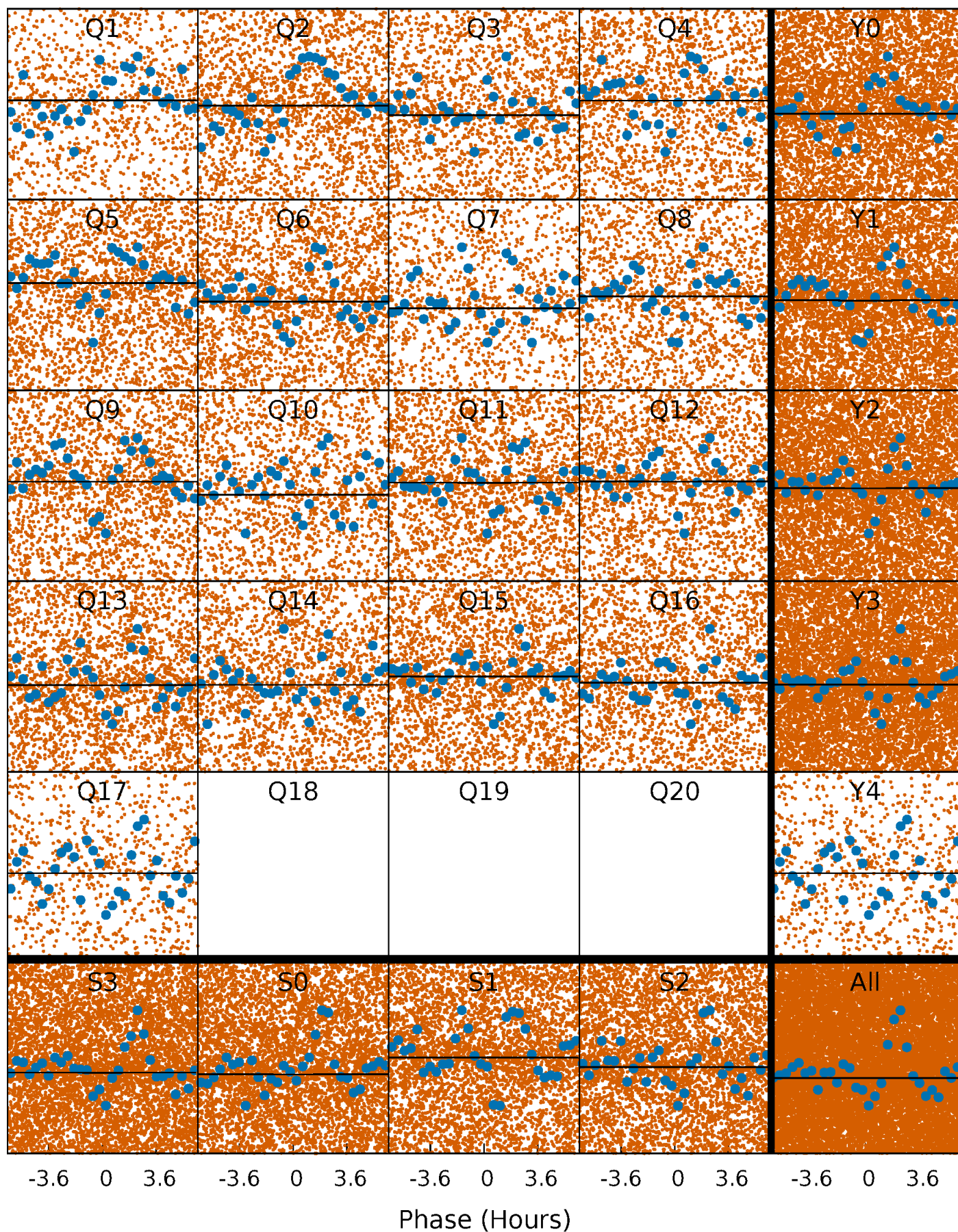
PDC Quarter-Phased Transit Curves

TCE 007199235-01 P= 0.566771 Days $T_0=131.747158$ (BKJD)



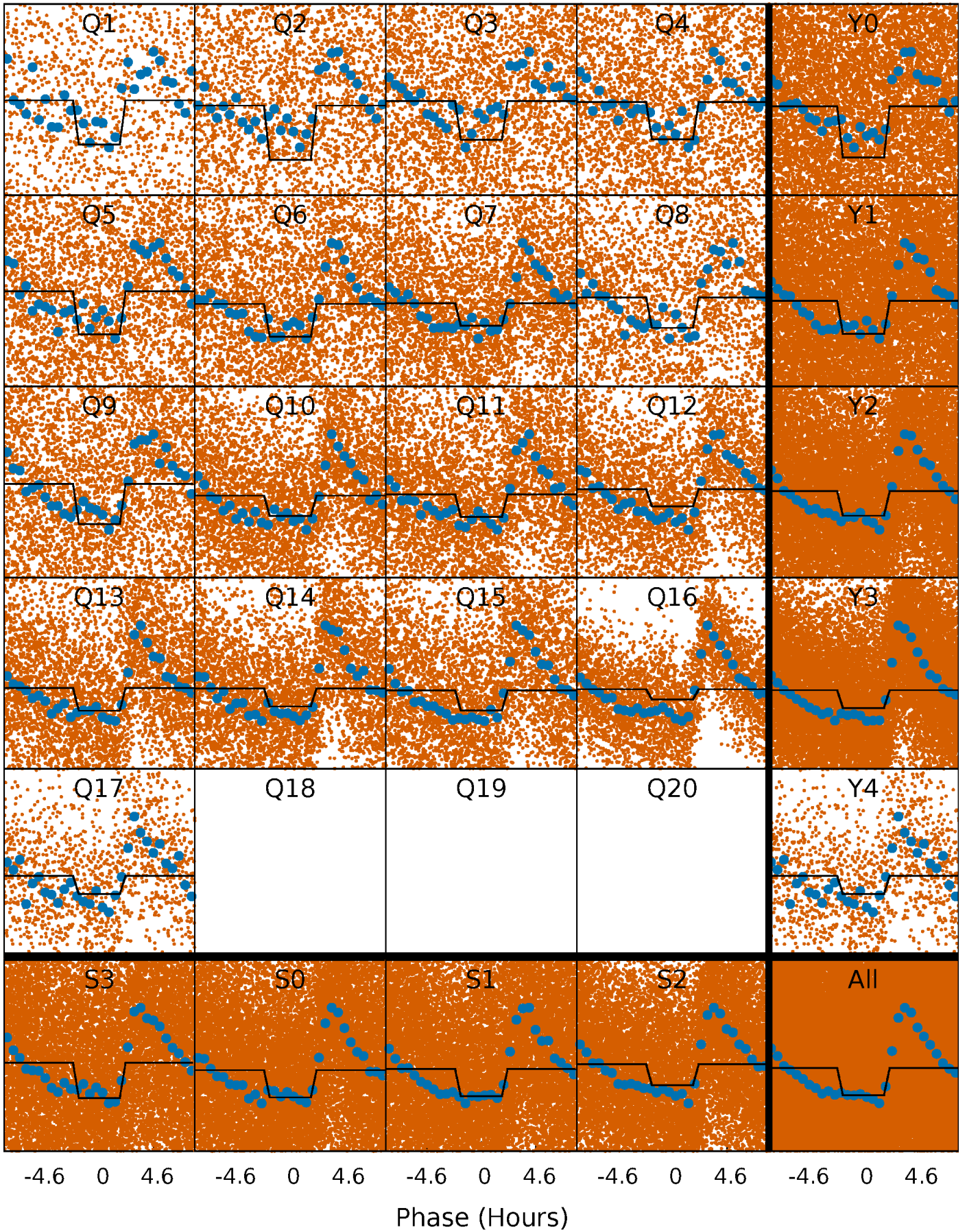
DV Quarter-Phased Transit Curves

TCE 007199235-01 P= 0.566771 Days $T_0=131.747158$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

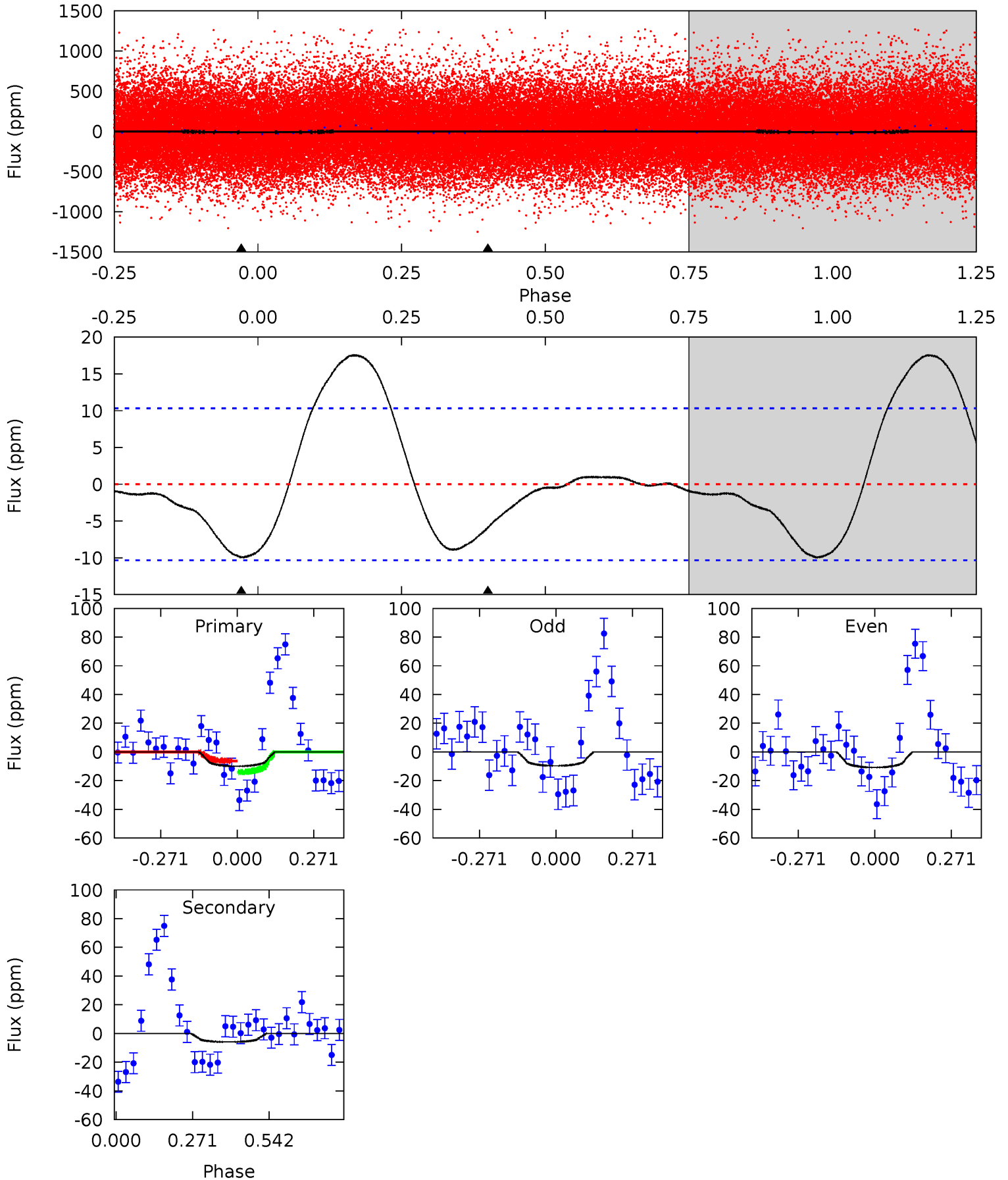
TCE 007199235-01 P= 0.566808 Days $T_0=131.636534$ (BKJD)



DV Model-Shift Uniqueness Test

007199235-01, P = 0.566771 Days, E = 131.180387 Days

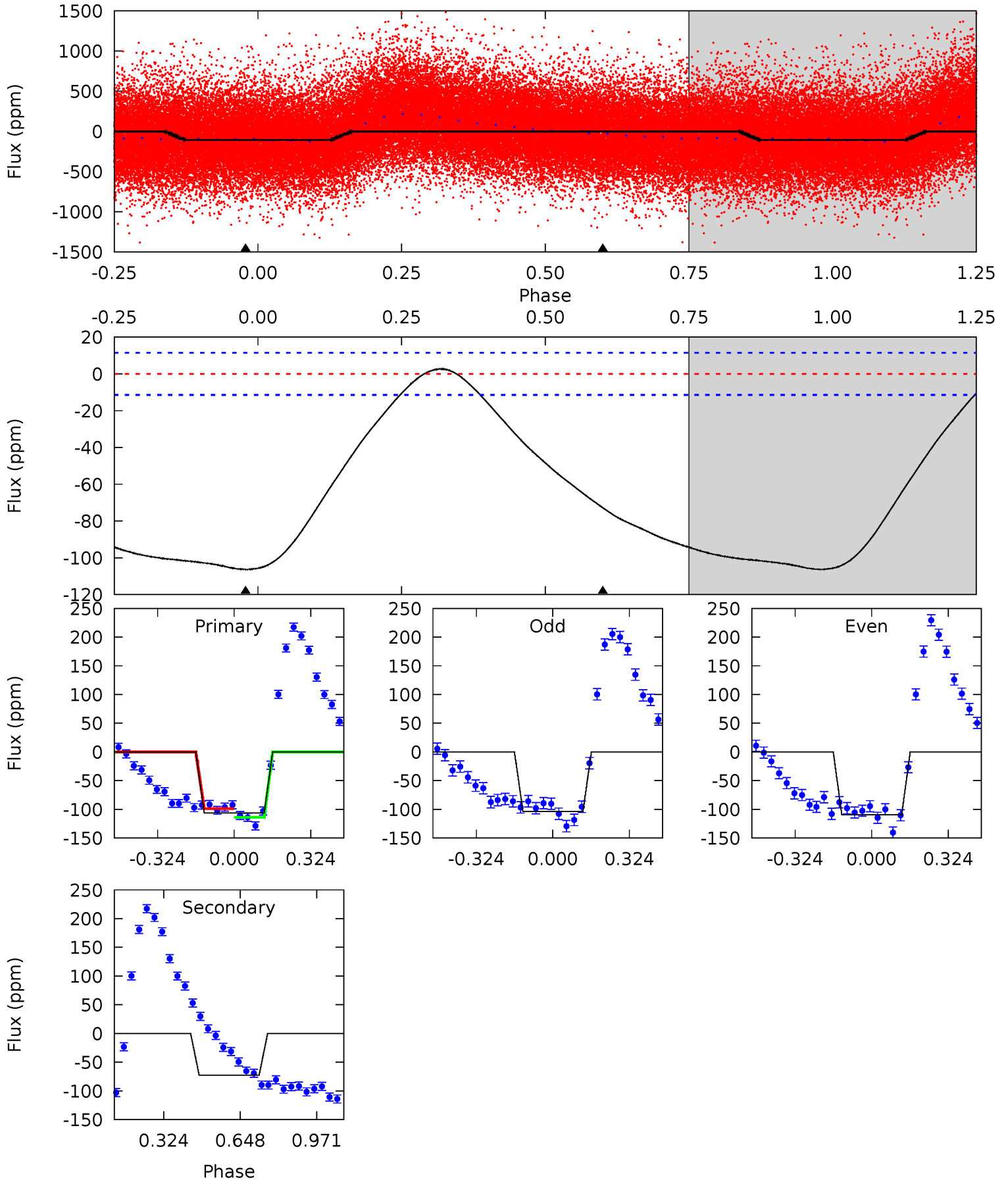
| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 4.21 | 2.51 | 0 | 0 | 4.35 | 1.10 | 0.13 | 4.21 | 4.21 | 2.51 | 2.51 | 0.24 | 0.84 | 0.64 | 1.65 |



Alt Model-Shift Uniqueness Test

007199235-01, P = 0.566808 Days, E = 131.069726 Days

| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 40.0 | 27.4 | 0 | 0 | 4.31 | 0.99 | 1.94 | 40.0 | 40.0 | 27.4 | 27.4 | 1.05 | 0.99 | 0.02 | 3.38 |



Stellar Parameters For KIC 007199235

| | $T_{\text{eff}}(K)$ | $\log(g)$ | [Fe/H] | $R (R_{\odot})$ | $M(M_{\odot})$ | $p_{\star} (\text{g}\cdot\text{cm}^{-3})$ |
|--------|----------------------|---------------------------|----------------------------|---------------------------|---------------------------|---|
| | 5841^{+158}_{-175} | $4.414^{+0.124}_{-0.186}$ | $-0.320^{+0.300}_{-0.300}$ | $0.961^{+0.269}_{-0.165}$ | $0.875^{+0.119}_{-0.079}$ | $1.389^{+0.770}_{-0.671}$ |
| | +3%/-3% | +3%/-4% | +94%/-94% | +28%/-17% | +14%/-9% | +55%/-48% |
| Source | PHO1 | KIC0 | KIC0 | DSEP | | |

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 007199235-01 / KOI

| Detrend | Depth (ppm) | $R_p (R_{\oplus})$ | $T_{\text{max}} (K)$ | $T_{\text{obs}} (K)$ | A_{obs} |
|---------|-------------|------------------------|----------------------|------------------------|----------------------------|
| DV | -6 ± 2 | $0.68^{+0.73}_{-0.49}$ | 3126^{+222}_{-164} | 3716^{+3004}_{-6338} | $1.097^{+13.625}_{-0.873}$ |
| Alt. | -73 ± 3 | $1.22^{+0.86}_{-0.66}$ | 3155^{+209}_{-201} | 5058^{+2608}_{-1040} | $4.393^{+15.993}_{-2.865}$ |

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

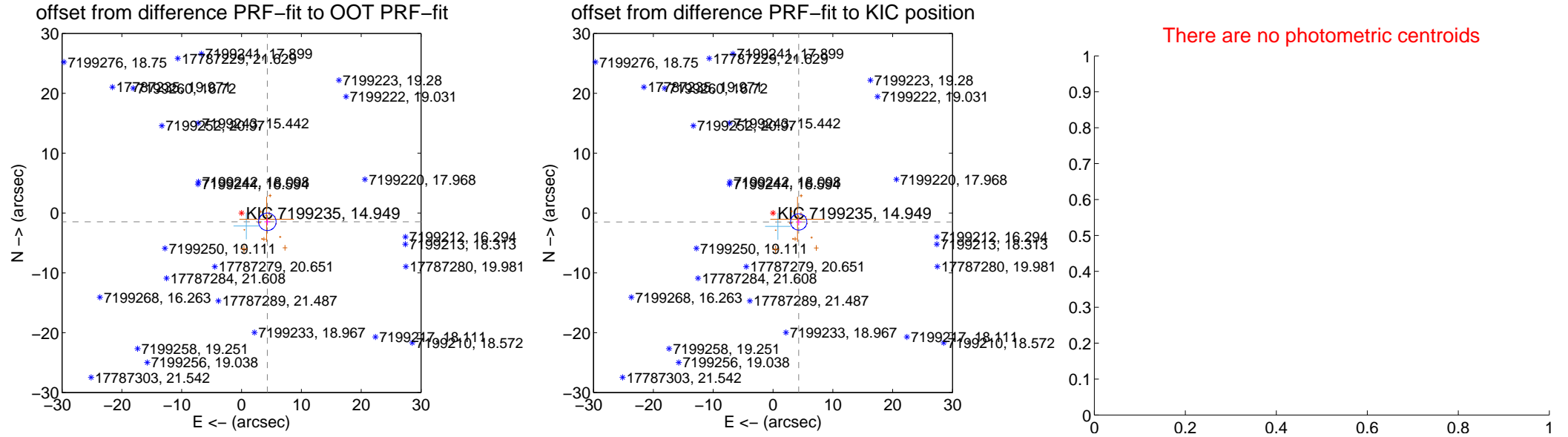
DV Centroid Data

Supplemental centroid analysis for 007199235-01. Kepler magnitude: 14.95. Transit SNR 0.03

There are 1 quarters with good PRF difference image offsets

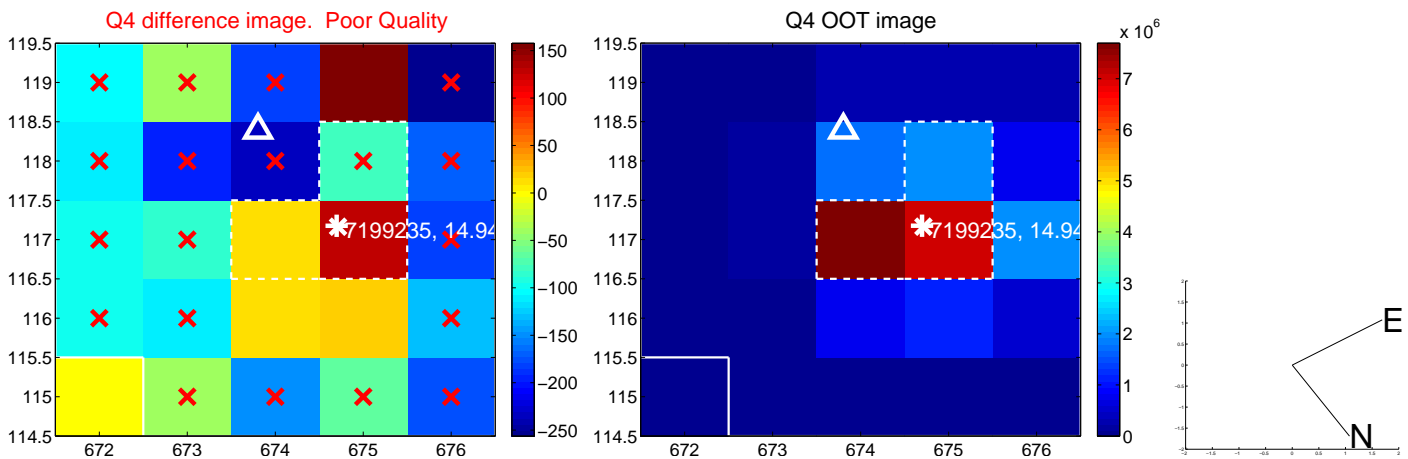
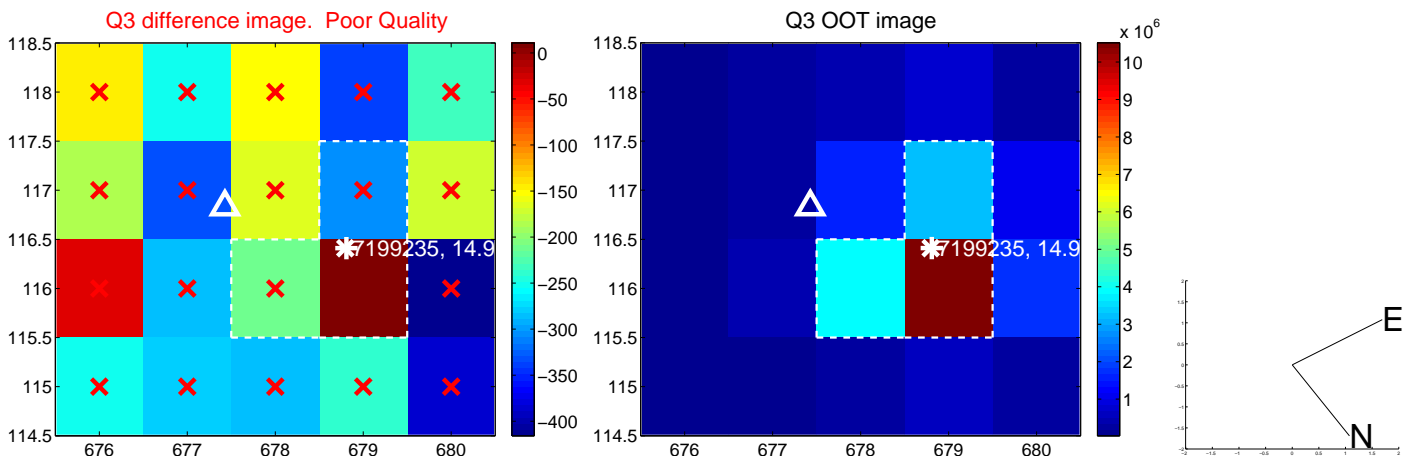
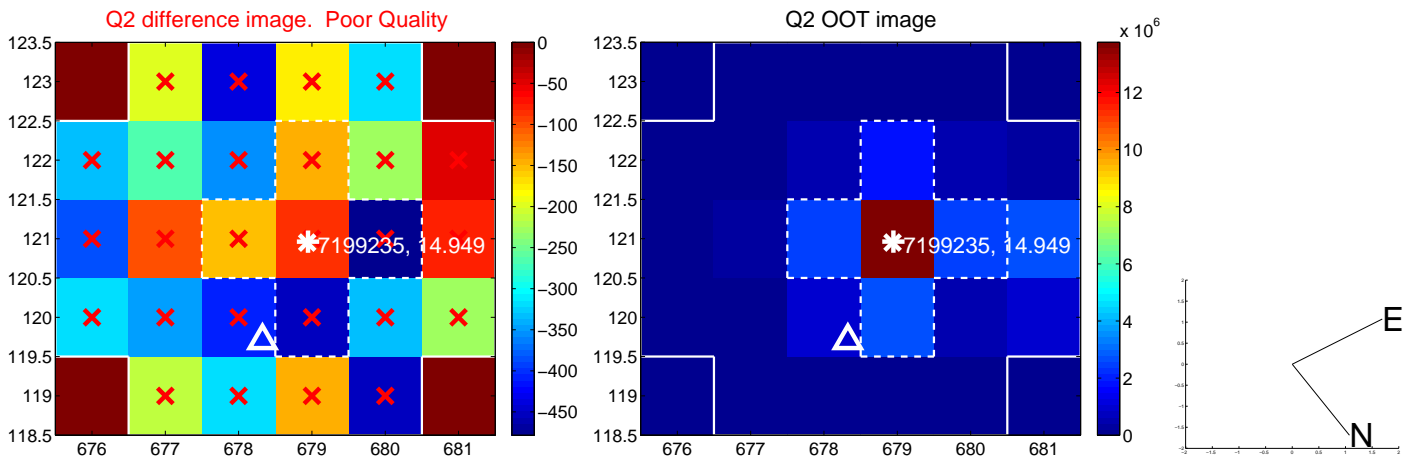
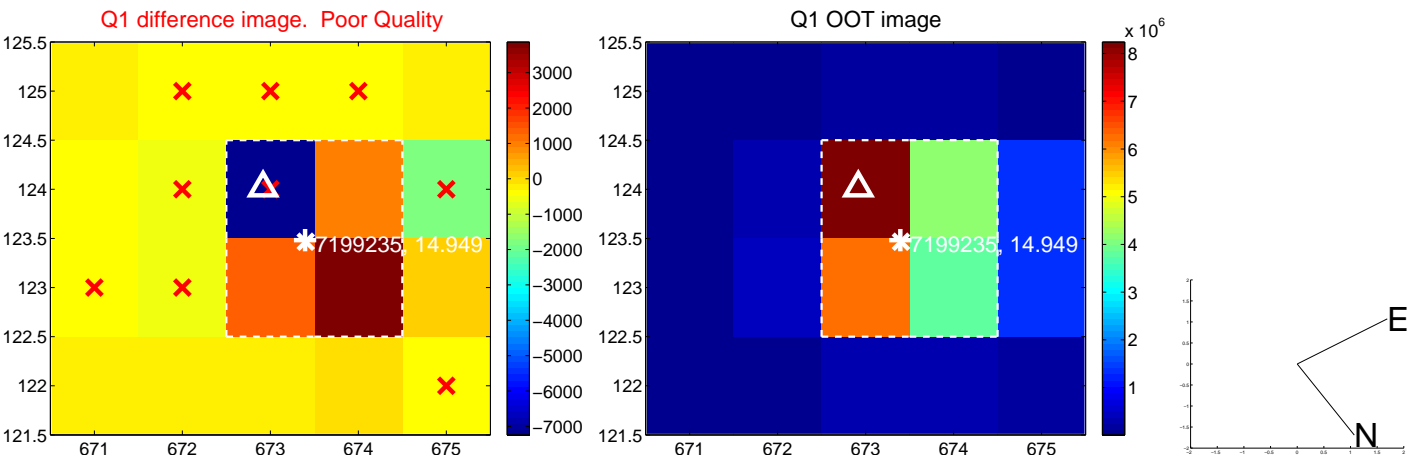
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

| | Distance in arcsec | Distance / σ | Δ RA | Δ Dec |
|---|--------------------|---------------------|--------------------|--------------------|
| PRF-fit source offset from OOT | 4.553 ± 0.489 | 9.31 | -4.311 ± 0.503 | -1.463 ± 0.584 |
| PRF-fit source offset from KIC position | 4.544 ± 0.455 | 9.99 | -4.292 ± 0.484 | -1.493 ± 0.593 |
| photometric centroid source offset | — | — | — | — |

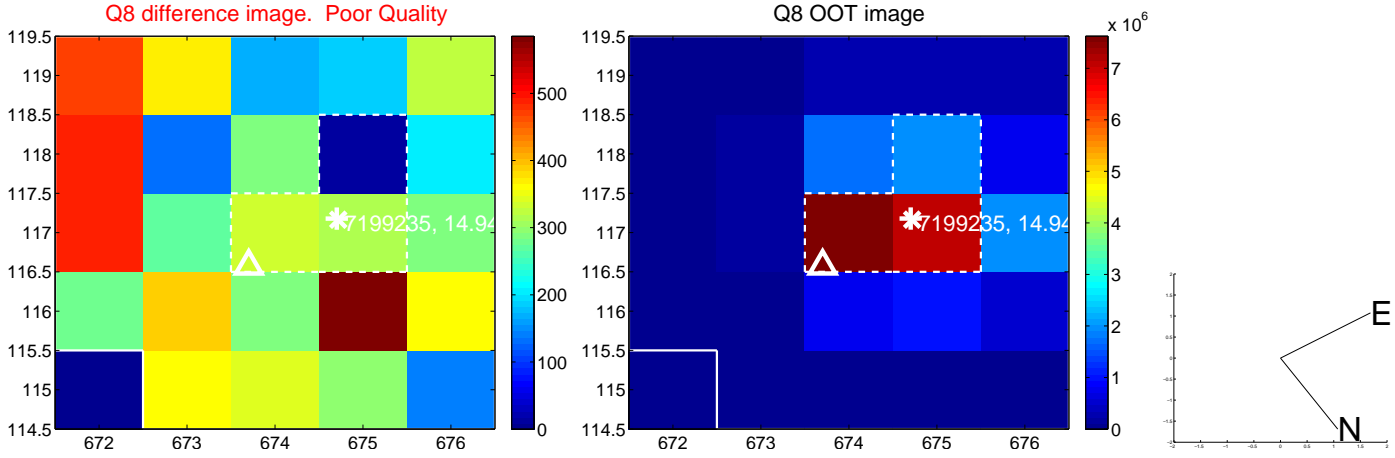
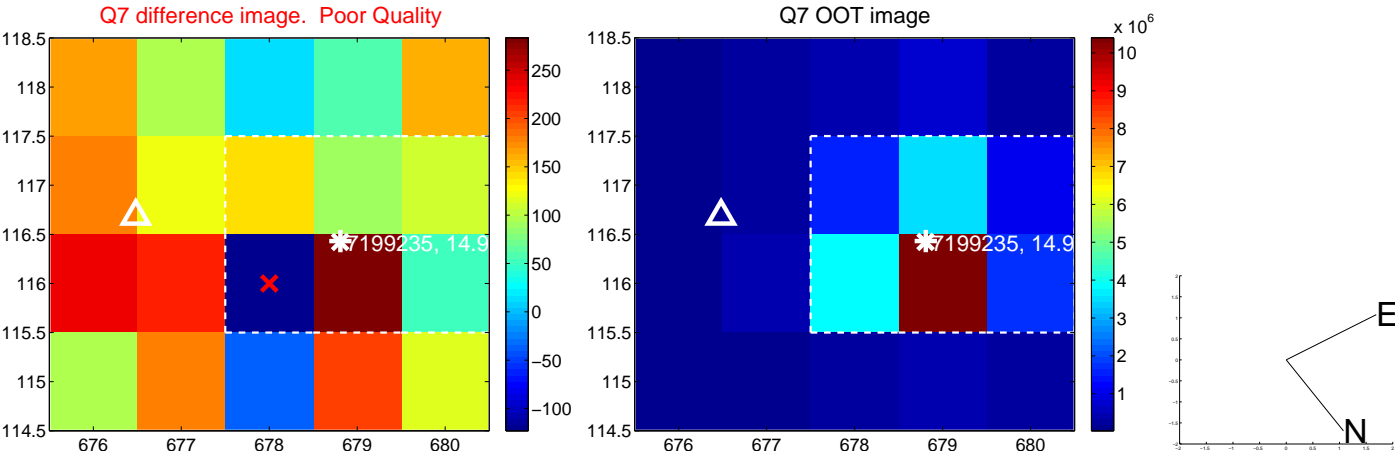
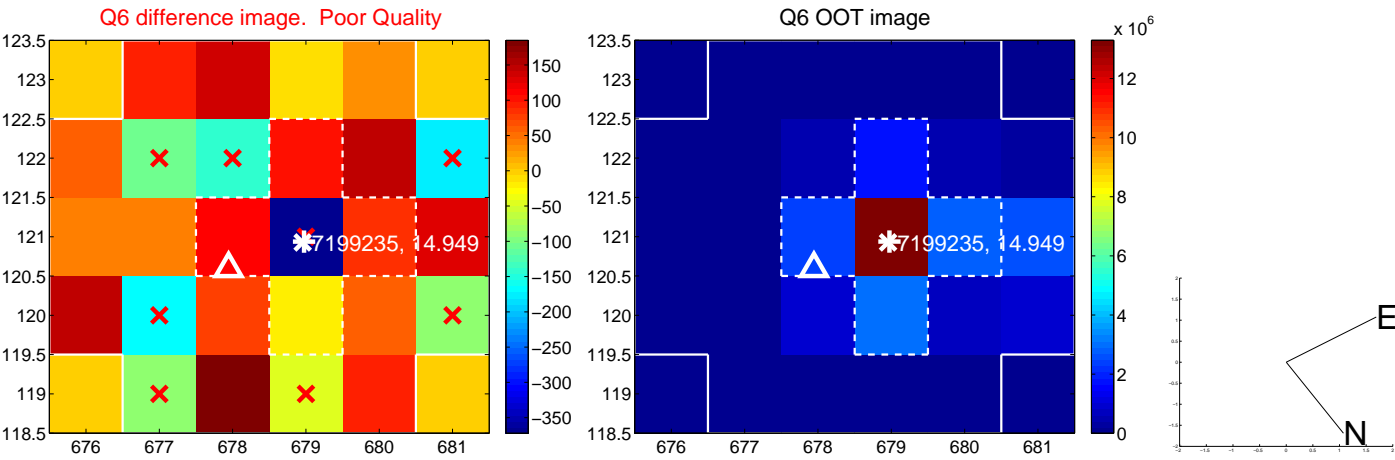
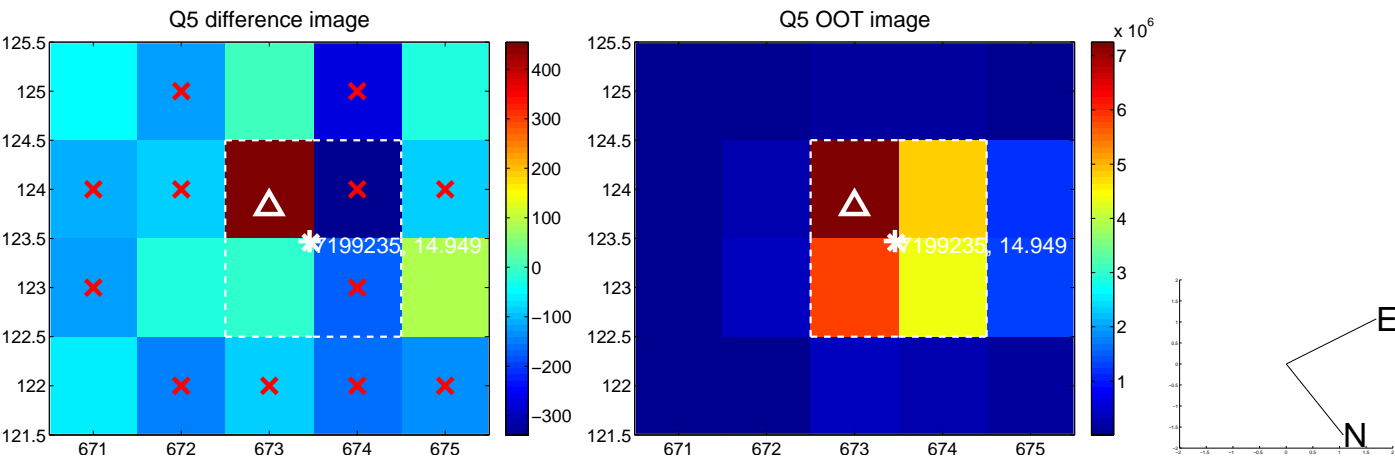


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

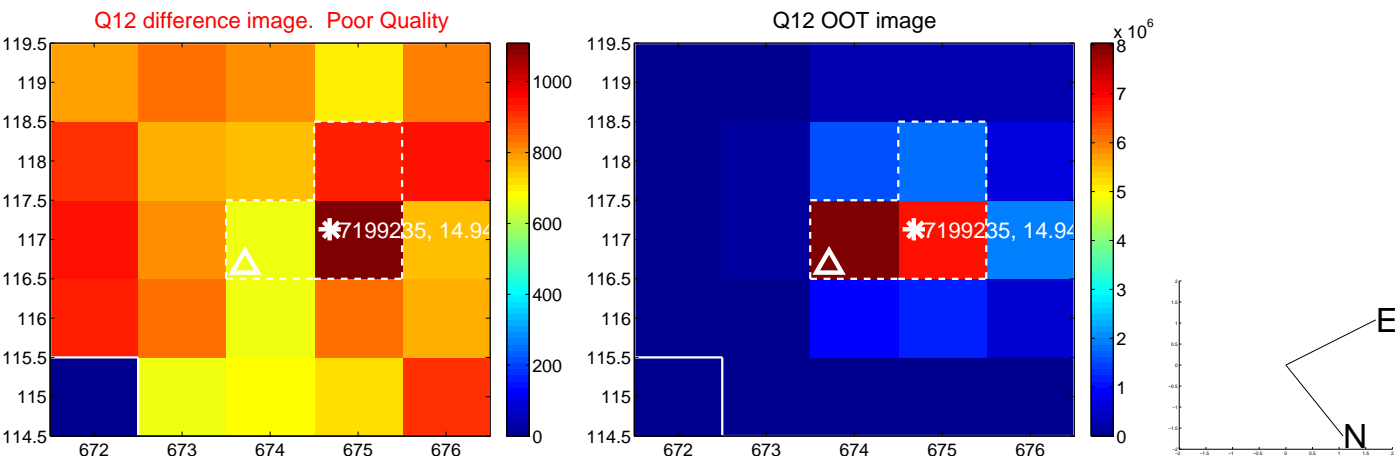
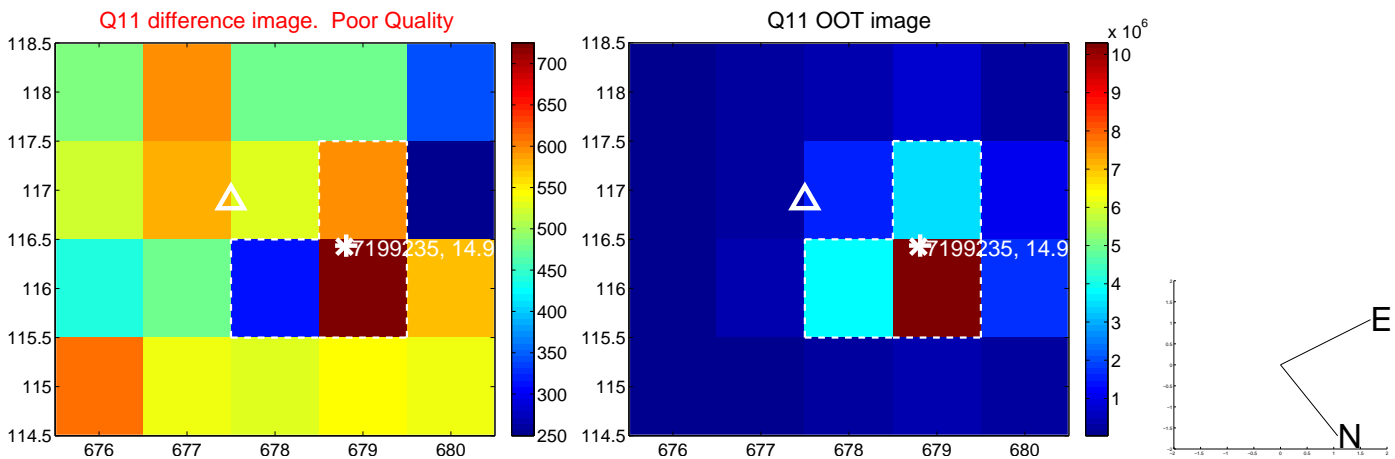
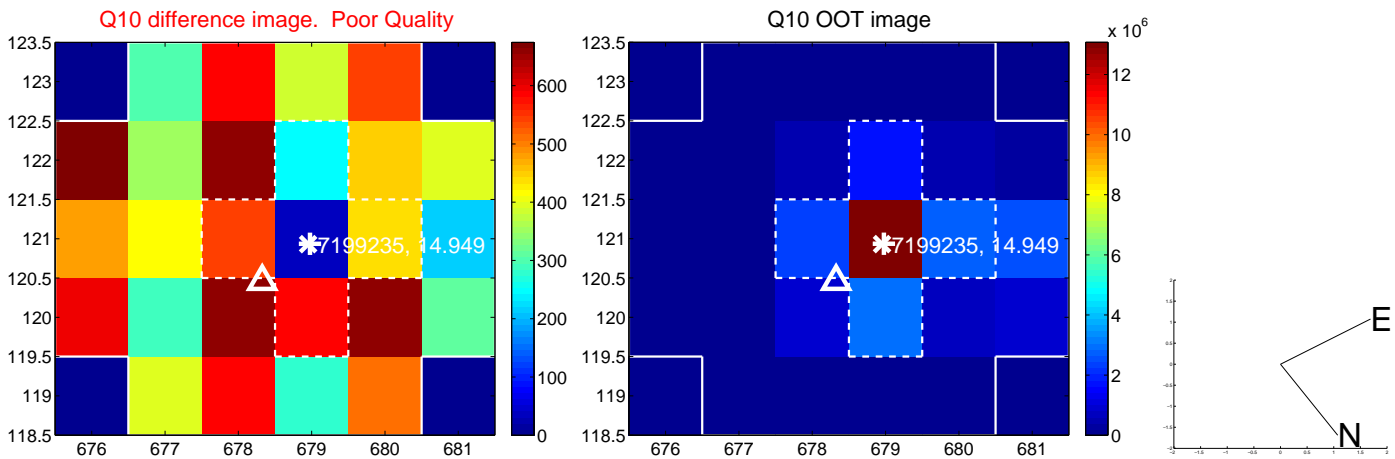
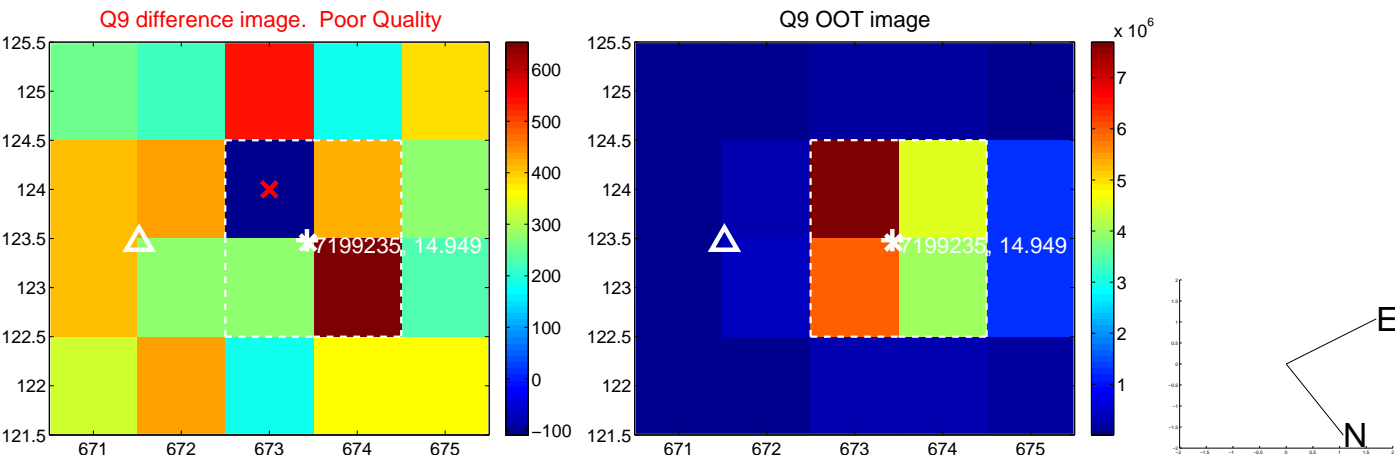
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



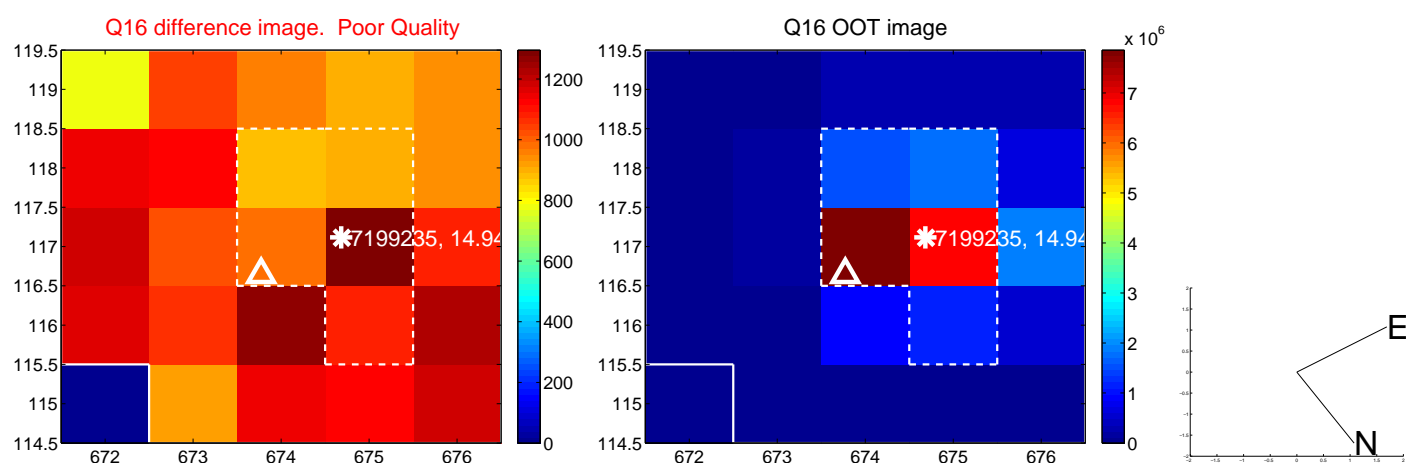
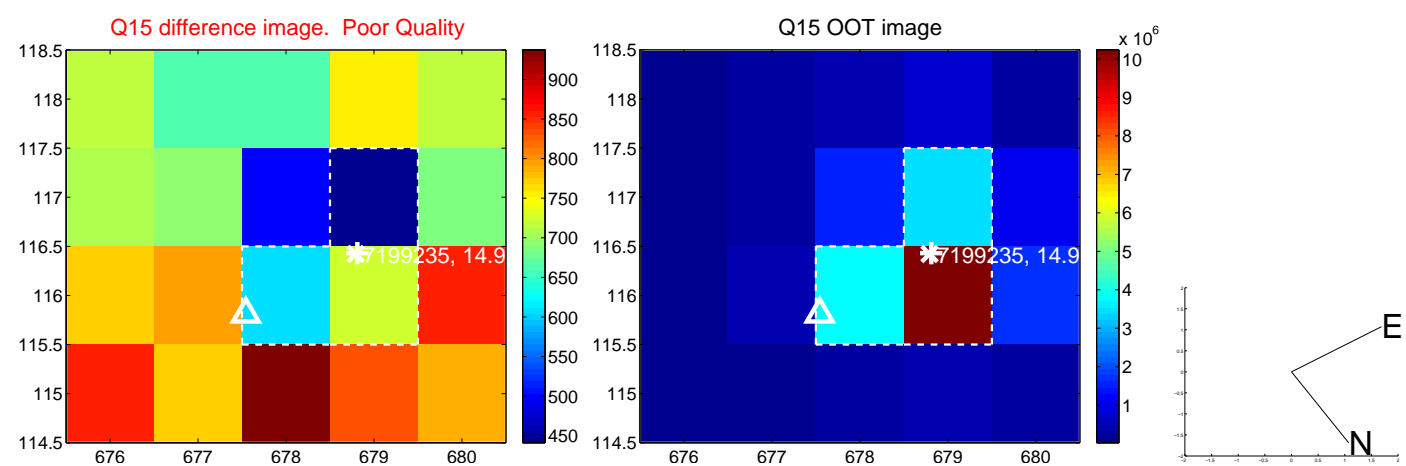
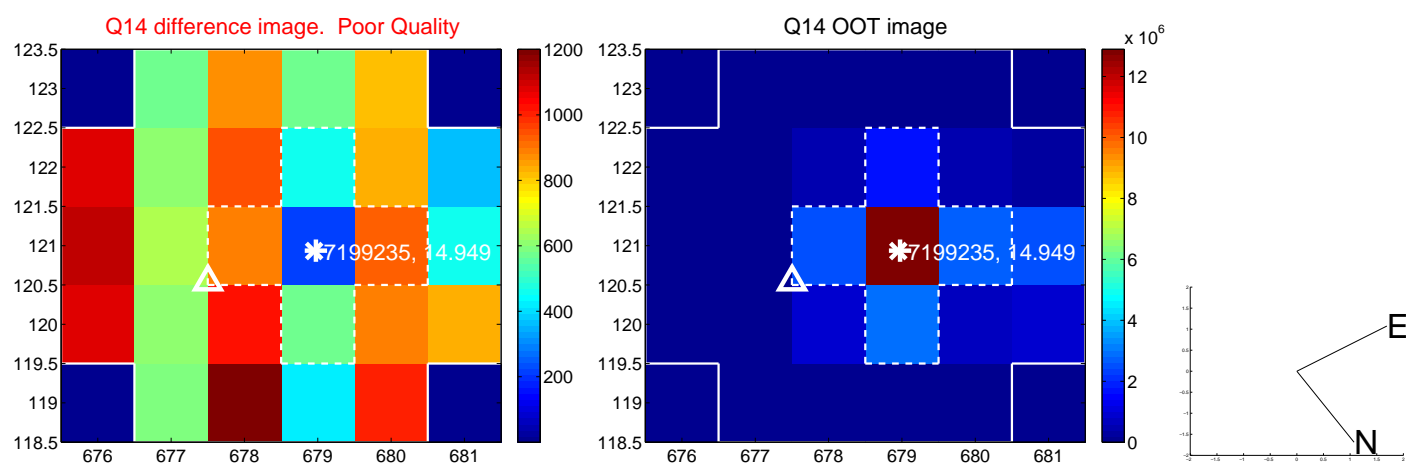
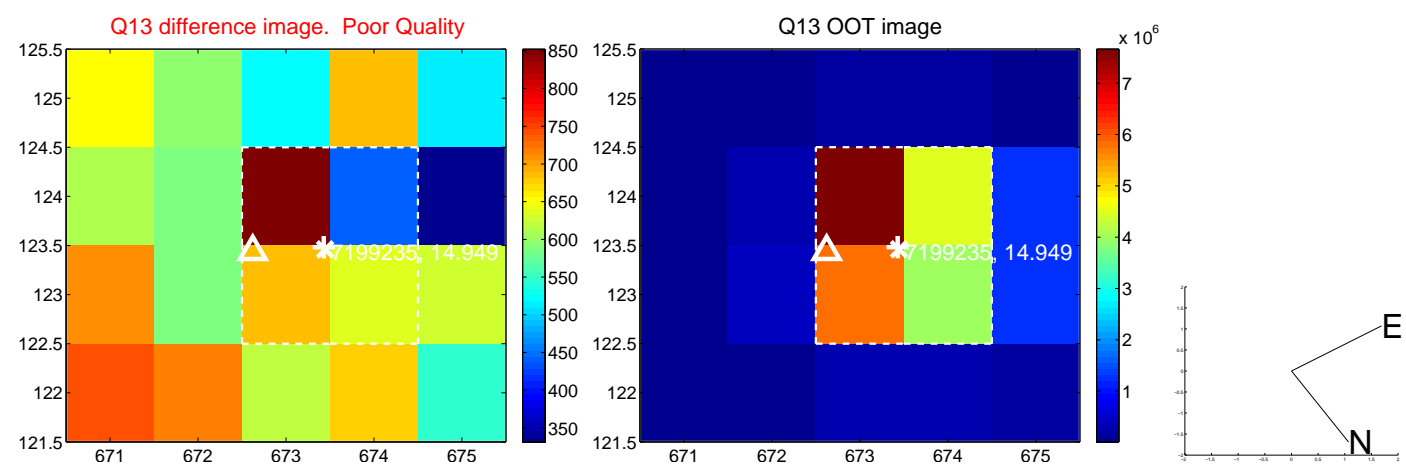
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



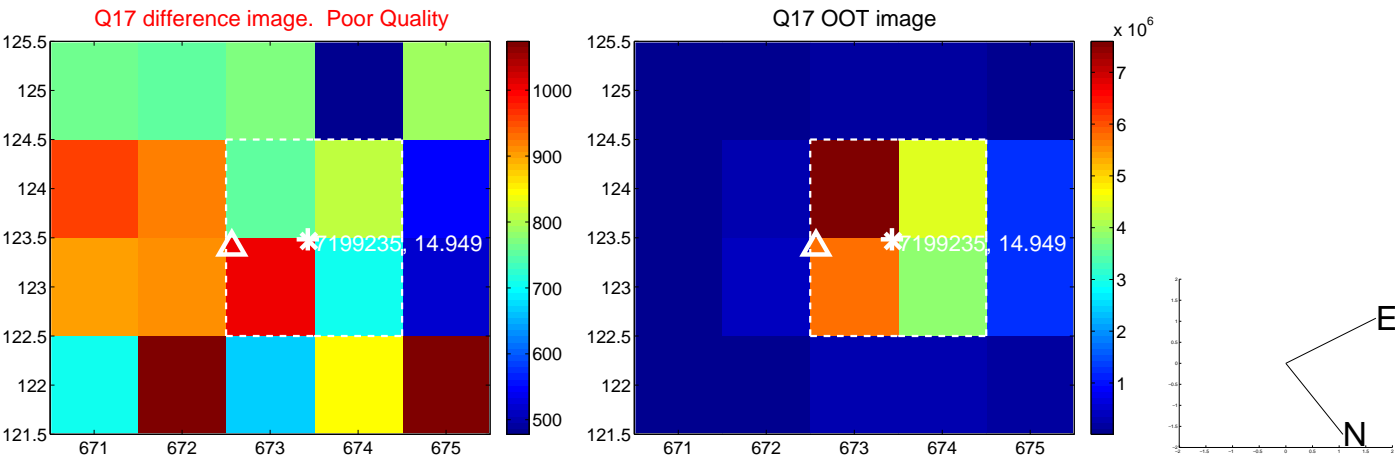
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination

